

# Inside Micrometers

For easy and accurate measurement of inside size and diameter

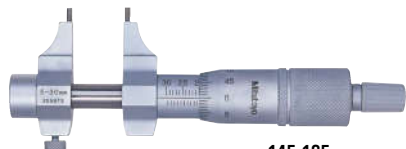
## Inside Micrometers SERIES 345, 145 — Caliper Type

**MeasurLink<sup>1</sup> ENABLED**  
Data Management Software by Mitutoyo

- Caliper type inside micrometer equipped with round pin or anvil type jaws, according to model.
- Carbide measuring faces.
- Equipped with a constant measuring-force device.
- Optional Setting Rings (nominal size below 300 mm), CERA Inside Micro Checker (more than 25 mm) and Gauge Block Accessory Sets are available as reference gages for datum adjustment. (Refer to pages C-47, C-26, and E-17 to E-20 for details)



345-250-30



145-185



145-187

### SPECIFICATIONS

Metric					
Order No.	Range (mm)	Resolution (mm)	Maximum permissible error $J_{MPE}$ ( $\mu$ m)	Jaw	Mass (g)
Digimatic (LCD)					
345-250-30	5 - 30	0.001	$\pm 5$	Pin	320
345-251-30	25 - 50		$\pm 6$	Anvil	325

Inch / Metric					
Order No.	Range (in)	Resolution	Maximum permissible error $J_{MPE}$ (in)	Jaw	Mass (g)
Digimatic (LCD)					
345-350-30	0.2 - 1.2	0.00005 in/ 0.001 mm	$\pm 0.00025$	Pin	320
345-351-30	1 - 2		$\pm 0.0003$	Anvil	325

Note: For the functions, refer to 293 Series with SPC data output on page B-8.  
This model is NOT water-proof. Also, the origin setting is the free preset type.

Metric					
Order No.	Range (mm)	Graduation (mm)	Maximum permissible error $J_{MPE}$ ( $\mu$ m)	Jaw	Mass (g)
Analog					
145-185	5 - 30	0.01	$\pm 5$	Pin	130
145-186	25 - 50		$\pm 6$	Anvil	140
145-187	50 - 75		$\pm 7$	Anvil	160
145-188	75 - 100		$\pm 8$	Anvil	180
145-189	100 - 125		$\pm 9$	Anvil	210
145-190	125 - 150		$\pm 10$	Anvil	230
145-191	150 - 175		$\pm 10$	Anvil	250
145-192	175 - 200		$\pm 10$	Anvil	270
145-217	200 - 225		$\pm 11$	Anvil	310
145-218	225 - 250		$\pm 11$	Anvil	330
145-219	250 - 275		$\pm 12$	Anvil	350
145-220	275 - 300		$\pm 12$	Anvil	370

Inch					
Order No.	Range (in)	Graduation (in)	Maximum permissible error $J_{MPE}$ (in)	Jaw	Mass (g)
Analog					
145-193	0.2 - 1.2	0.001	$\pm 0.00025$	Pin	130
145-194	1 - 2		$\pm 0.0003$	Anvil	140
145-195	2 - 3		$\pm 0.00035$	Anvil	160
145-196	3 - 4		$\pm 0.0004$	Anvil	180

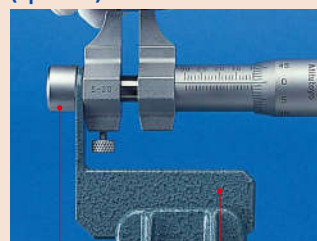
Note: The minimum pitch circle measurement is  $\phi 5$  mm with pin types (145-185 and 345-250-30).

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Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink (refer to page A-5 for details).



### Accessories for 145-185 / 186 / 193 / 194 (optional)



Cap (300401) Holder (300400)

Note 1: This instrument requires the cap and the holder for mounting on a micrometer stand.  
Note 2: It may not be applicable to a custom specification.

### Technical Data

- Battery and Scale Type  
(for 345-250-30/251-30/350-30/351-30)  
SR44 (1 pc.), **938882**, for initial operational checks (standard accessory)
- Battery life: Approx. 2.4 years under normal use
- Scale type: Electromagnetic induction-type rotary encoder

### Optional Accessories

- Refer to page A-27 for details.
- Connecting cables with IT / DP / MUX, etc.  
1 m: **05CZA662**  
2 m: **05CZA663**
  - USB Input Tool Direct (2 m): **06AFM380B**
  - Connecting cables for U-WAVE-T  
For standard (160 mm): **02AZD790B**  
For foot switch: **02AZE140B**

## DIMENSIONS

Unit: mm

